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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,875	05/08/2000	DONALD ARTHUR REYNOLDS	65008-018	4421

27305 7590 12/28/2001

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EXAMINER

SHIPSIDES, GEOFFREY P

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 12/28/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

8W-6

Office Action Summary	Applicant(s)	
	REYNOLDS, DONALD ARTHUR	
	Art Unit	
	Applicant N .	
	09/486,875	
	Examiner	
	Geoffrey P. Shippides	1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 7 is objected to because of the following informalities: The word "am" on line 2 of claim 7 should be replaced with --an--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 7 teaches that a primary seal is cut to form an angled joint while a secondary seal is "radiussed around the corner." The instant specification fails to expressly define what the term "radiussed" entails. The specification teaches that in prior art that a corner "needs to be radiused at 18 to ensure weather-tightness" (Page 1, line 35 – Page 2, line 1 of the instant specification) and the prior art figure 2 teaches a curved section along the inner corner. The specification fails to teach how the joint seal is radiussed with respect to the claimed invention. The specification further teaches a sealing lip 40 and a second sealing lip 42. (Page 4, lines 23-31 of the instant specification). A person of skill in the art would further not know how to slightly curve the inner seal (42) and make the outer seal (40) form a 90-degree angle. Appropriate correction is required, but the applicant is guarded against the insertion of new matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,069,849 (Wain).

Wain teaches a method for forming a window frame molding “by extruding a plurality of linear members of a suitable plastic material, selectively cutting away a portion of one end of each extrusion, placing the cut away ends in a mold with the ends in juxtaposition within the mold and coacting with the mold to form a corner cavity, and injection molding a similar plastic material into the corner cavity to form a molded corner mold section lockingly interconnecting the extrusions. (Abstract, lines 3-11) It is further noted that the word “mitring” has the same meaning as the word “cutting.” Wain also teaches removing part of the rear face of the extruded pieces prior to placing the extruded parts in a mold. (Figure 14)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,069,849 (Wain).

The discussion of Wain above applies herein.

With regard to claims 2 and 3, Wain does not teach the use of silicone rubber in the production of the extruded parts of or in the injection molding of the joint part. Wain teaches the use of "a suitable plastic material" (Column 5, lines 43-44). Wain gives the example of PVC as a suitable plastic material. It is well known in the art to use multiple plastic materials, including silicone rubber, in constructing molded articles with each material imparting specific qualities with respect to strength and elasticity. It is further well known in the art to provide sealing structures with appropriate strength and elastic qualities to impart a resilient seal, and many silicone rubber compositions are well known to possess such qualities. It is further well known in the art that the choice of a suitable plastic material is often dependent on cost and availability. It would have been obvious to one having ordinary skill in the art at the time of invention to preform the method as taught by Wain using any material including silicone rubbers to form a well connected sealing structure joint and to choose the material based upon cost and availability. Wain further teaches the "injection molding of a similar plastic material into the corner cavity" to form the joint. It would have been obvious to one having ordinary skill in the art at the time of invention to further injection mold the same material, as the extruded portions, into the corner cavity in order to ensure material compatibility and to reduce the over all cost of the material though bulk purchasing of the materials.

With respect to claims 4 and 5, Wain teaches the production of a corner. Wain does not specifically teach that the corner is 90 degrees, but Figure 14 shows a corner that approximates a 90-degree corner. It is also well known in the art to form corners of

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90 degrees to simplify framing techniques due to the required 360 sum of all the corners in a frame structure. It would have been obvious to one having ordinary skill in the art at the time of invention to produce a corner joint as taught by Wain with a 90 degree bend.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,069,849 (Wain) as applied to claims 2-5 above, and further in view of U.S. Patent No. 5,699,603 (Backes et al.)

With regard to claim 6, Wain does not teach extruded parts having multiple sealing structures. Wain teaches a sealing strip that forms a seal in total contact with the part against which it is to be sealed (Figure 4). Wain, however, also teaches that "various changes may be made in the disclosed embodiment without departing from the scope or spirit of the invention" (Column 8, lines 22-24). Backes et al., however, teaches a sealing or guiding strip to be jointed with multiple sealing lips (Figures 7 and 8). It is further well known in the art to produce sealing structures with multiple sealing contacts to improve the sealing quality of the overall seal so that if one seal is compromised, a second sealing contact structure remains in place to ensure an overall seal. It would have been obvious to one having ordinary skill in the art at the time of invention to modify the extruded strips as taught by Wain (Figure 2) to include a series of sealing lips as taught by Backes et al. in order to ensure a more resilient sealing structure.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,069,849 (Wain) in view of U.S. Patent No. 5,699,603 (Backes et al.) as applied to claims 2-5 above, and further in view of U.S. Patent No. 2,364,962 (Eagles).

With regard to claim 7, Wain does not teach a partial cut of the extruded structure allowing a portion of the extruded structure to remain intact and to be bent around to form an angled joint, but does however teach "various changes may be made in the disclosed embodiment without departing from the scope or spirit of the invention" (Column 8, lines 22-24). Eagles, however, teaches of joining hollow thermoplastic articles in a similar procedure. Eagles teaches an embodiment particularly useful for refrigerator cabinets (Page 1, Column 1, lines 4-5). Eagles teaches the need for a suitable corner gasket on right angle bends (Page 1, Column 1, lines 17-18). Eagles teaches a similar procedure of cutting a continuous length piece of sealing structure and injection molding material into a recess to form an angled joint. Eagles further teaches that a right angle could be prepared "by cutting out a 90° wedge, leaving the portion 22 uncut" (Page 1, Column 2, lines 38-39). It would have been obvious to one having ordinary skill in the art at the time of invention to modify the method as taught by Wain by cutting out a 90 degree wedge as taught by Eagles and leaving an outer portion of the extruded part uncut prior to injection molding joining material. One would be motivated to do so in order to ensure that part of the corner joint is a continuous structure and there by allows a continuous seal. It should be further noted that the uncut portion would not form a discontinuous change in direction as a complete cut of the extruded part would, and would result in a radius of curvature at the corner joint proportional to the width of material left uncut.

Conclusion

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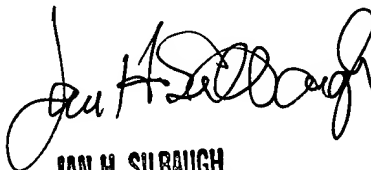
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 5,256,361 (Keys), U.S. Patent No. 2,249,028 (Mulderink), U.S. Patent No. 2,392,734 (Haberstump), U.S. Patent No. 2,637,073 (Walther), U.S. Patent No. 4,183,778 (Mesnel), Japanese Patent No. JP-63034107-A (Ono et al.), and Japanese Patent No. JP-56017240-A (Hotta) are cited as art of interest to show the current state of the art at the time of invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey P. Shipsides whose telephone number is 703-306-0311. The examiner can normally be reached on Monday - Friday 9 AM till 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jan H Silbaugh can be reached on 703-308-3829. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Geoffrey P. Shipsides/gps
December 19, 2001


JAN H. SILBAUGH
SUPERVISORY PATENT EXAMINER
ART UNIT 1732
12/20/01